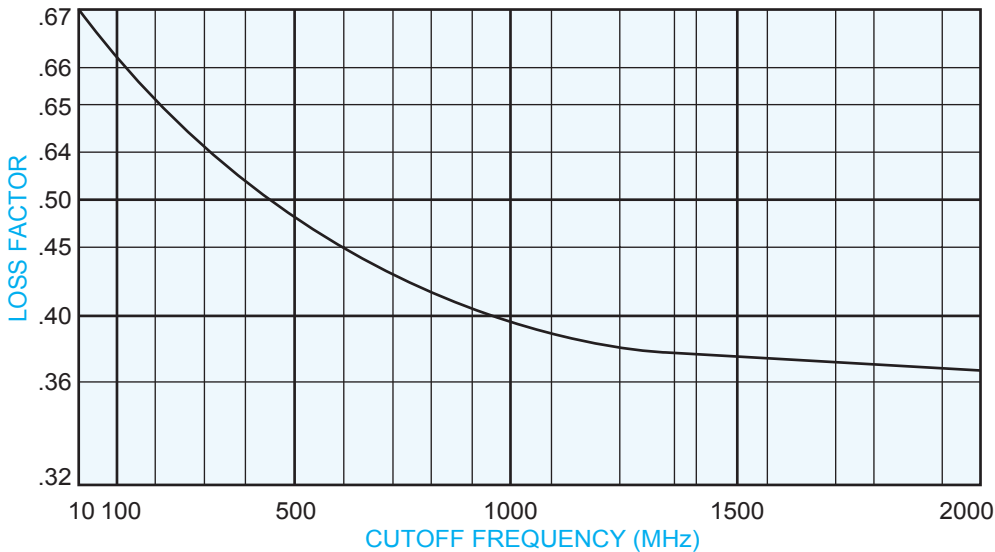




SPECIFICATIONS	STANDARD	*SPECIAL
ELECTRICAL		
Cutoff Frequency (Fco)	20 to 2000 MHz	10 to 3000 MHz
Number of Sections Available	3 to 4	2 to 6
Nominal Impedance	50Ω	50 to 100Ω
Maximum Insertion Loss	See Curve	See Curve
Maximum VSWR (Fco to 3 Fco)	1.5/1	1.3/1
Attenuation in the Stopband	See Page 96	See Page 96
Maximum Input Power (Average) (Watts to 10,000 ft.)	2	4
Maximum Input Power (Peak) (Watts to 10,000 ft.)	20	40
ENVIRONMENTAL		
Shock	15G's	75G's
Vibration	5G's	30G's
Humidity	90% relative	100% relative
Altitude	Unlimited	Unlimited
Temperature Range (Operating)	-25°C to + 85°C	-54°C to + 100°C
Temperature (Non-Operating)	-54°C to + 100°C	-62°C to + 125 °C
MECHANICAL		
Approximate Weight	1/4 oz.	1/4 oz.
Mounting Provisions	See Next Page	See Next Page
Special Configurations	See Next Page	See Next Page

*Contact Lark Applications Engineering



INSERTION LOSS:
The maximum Insertion Loss at cutoff frequency is equal to:

$$LF \times N + 0.05dB$$

Where:

LF = Loss Factor

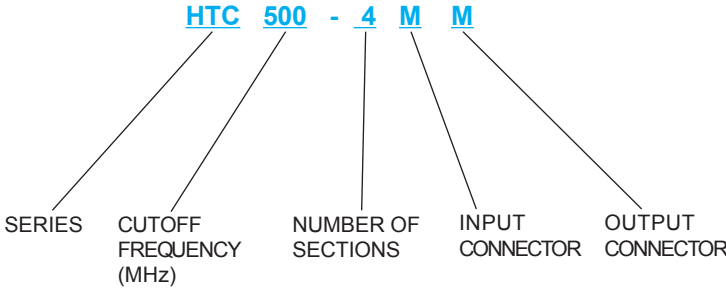
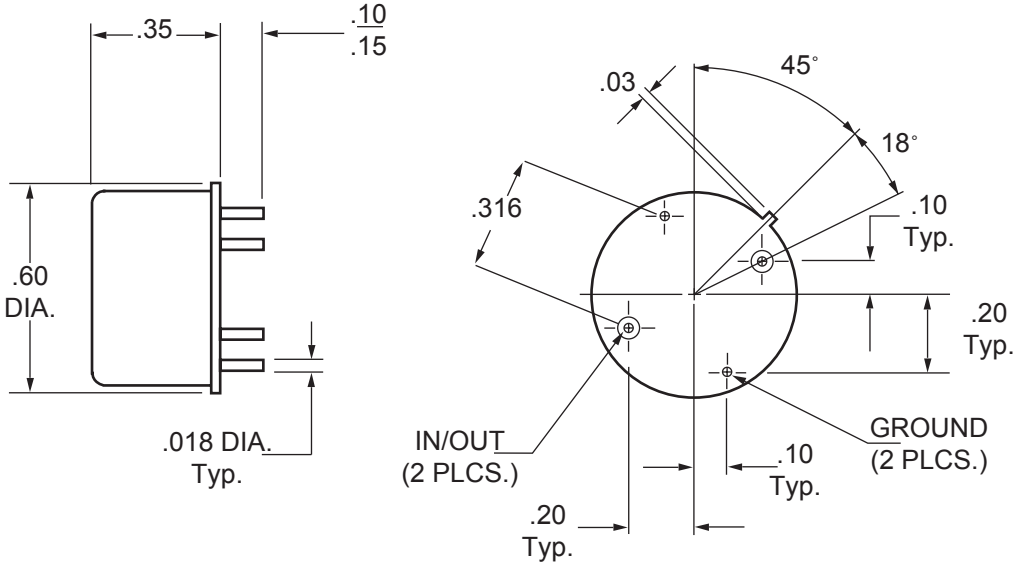
N = Number of Sections

Example:

A 3 section HTC with a cutoff frequency of 500 MHz would have,

$$0.48 \times 3 = 1.44 + 0.05 = 1.5dB$$

MECHANICAL SPECIFICATIONS



STOPBAND ATTENUATION

The graph on the next page defines the normal specification limits on attenuation for Lark highpass filters. The minimum level of attenuation in dB is shown as a function of the relative frequency.

A. Relative frequency is defined as the frequency to be attenuated divided by the normal cutoff frequency.

B. Cutoff frequency is defined as the 1.5/1 VSWR cutoff frequency (-4%-0%).

Example:

Specify a highpass filter to pass 30 MHz and attenuate 18 MHz a minimum of 30dB.

1. 18 MHz is a relative frequency of 1.66

$$\frac{30}{18} = 1.66$$

2. Reading from the curve at a relative frequency of 1.66, we find that a three section filter has a normal specification limit of 32dB. Therefore, a highpass filter with three or more sections would be required to meet the 30dB attenuation specification.

Lark manufactures many other types of highpass filters from 100 KHz to 3 GHz. Please contact us directly or through our local sales representative with any of your filter requirements.

